

REMARKS

Applicant has amended claims 12-16, 18, 19, and 22-24, canceled claims 17, 20, and 21 without prejudice to or disclaimer of subject matter therein, and added new claims 25-32. No new matter has been added by way of these amendments. In view of the above amendments and the following remarks, reconsideration of the outstanding office action is respectfully requested.

The Office has objected to informalities in claims 12-21, 22, and 24 asserting the “for” and “able to” and “wherein” clauses incorporated in these claims introduce questions as to the limiting effect of the language immediately following and should be replaced by language that positively recites the task preformed by the claim elements. Additionally, the Office asserts claim 24, lines 1-2 recite, “electronic processing means process receive information” which should either include the word “process” or “receive.” Accordingly, claims 12-16, 18, 19, 22, and claim 24 have been amended as set forth above to positively recite the task preformed by the claim elements so these claims are not interpreted as means plus function claims and to correct the typographical error in claim 24. Accordingly, in view of the foregoing amendments and remarks, the Office is respectfully requested to reconsider and withdraw this objection.

The Office has rejected claims 12-24 under 35 U.S.C. §112, second paragraph, asserting claim 12, line 4, recites “storing predefined information”, while line 5 recites “the received information” which introduces uncertainty regarding the claim scope. Additionally, the Office asserts claim 12, lines 22-23 recite “information on the situation onboard the aircraft is stored” and line 25 recites “information generated onboard the aircraft”, where it is unclear as to how this “information” relates to the preceding “information” recited in lines 4 and 5. Further, the Office asserts claim 12, line 10 recites “the aircraft onboard situation”, which lacks proper antecedent basis. The Office also asserts claim 13, line 1 recites “said information”, where it is unclear to which “information” recited in the preceding paragraph this is referring, claim 15, line 2 recites “establishing whether they have been disabled”, where it is unclear to what “they” is referring, claim 18, line 2 recites “information”, where it is unclear to which of “information” recited in the lineage of claim dependency this is referring, claim 22 includes the same uncertainties regarding the term “information” apply as recited above for claim 12, claim 23, lines 18, 20, and 22 recite “operating logic”, and this term is not recited anywhere in the specification, and it is unclear on its face what this term is meant

to convey rendering the claim indefinite. Further, the Office asserts, claim 23, line 29 recites “said information”, which possesses improper antecedent basis, and claim 23, line 30 recites “a second alarm state”, despite the absence of a “first alarm state” earlier in the claim, and it is unclear if this claim was intended to only possess one “alarm state” or if instead a “first alarm state” was inadvertently omitted.

Accordingly, Claim 12 has now been amended as set forth above to recite, for example, the phrase “real-time information” distinguished from “predefined information,” also recited, and the phrase “a first set of parameters associated with the aircraft’s onboard situation in real time.” Claim 13 has now been amended to recite “stored predefined information.” Claim 15 has now been amended to recite “the video cameras.” Claim 18 has now been amended to “to obtain the first and second set of parameters.” Claim 22 has now been amended to recite the phrases “first set of parameters . . .” and “second set of parameters . . .” and to delete the term “information.” Claim 23 has now been amended to delete the term “operating logic,” the term “said” after the term “transmitting,” and the term “second” before the term “alarm.” Accordingly, in view of the foregoing amendments and remarks, the Office is respectfully requested to reconsider and withdraw this objection.

The Office has rejected claims 12-13 under 35 U.S.C. §103(a) as allegedly being unpatentable over International Publication No. WO 03/023322 to Turung (Turung), claims 14-15 and 18-24 under 35 U.S.C. §103(a) as allegedly being unpatentable over Turung in view of U.S. Patent Application No. 2004/0079837 to Nelson (Nelson), and claims 16-17 under 35 U.S.C. §103(a) as allegedly being unpatentable over Turung in view of Nelson, and further in view of U.S. Patent No. 4,860,763 to Schminke (Schminke).

Turung, Nelson, and Schminke, taken alone or in combination, do not disclose or suggest, “during an emergency, the avionic unit is configured to externally and/or automatically disable the collision avoidance function in accordance with predefined rules, immune to an operational input from the pilot, a hijacker, or an on-board terrorist,” as recited in claims 12 and 23 or, “during an emergency, the avionic unit in communication with the ground control station is configured to externally and/or automatically disable the collision avoidance function in accordance with predefined rules, immune to an operational input from a hijacker or a terrorist,” as recited in claim 22.

Although Turung discloses a system to improve aircraft onboard safety, and in particular, a system that takes partial or full navigational control of the aircraft, Turung's system allows the navigational control to fully or partially release navigational control of the aircraft by "a switch, key inputted code, key card, electromagnetic signal, computer command, voice command, retina scan, fingerprint scan, and/or the like." (*see*, Turung at page 3, lines 6-10, cited by the Office). All of these parameters that disable Turung's navigational system require a pilot or other human input. For example, on page 5, lines 27-29, also cited by the Office, Turung notes (emphasis added):

In such situations, the pilot and/or authorized personnel may want to fully or partially regain navigational control from the emergency navigational system and attempt to again manually control the aircraft.

In other words, Turung's system does not make itself immune from a human input during an emergency, and on the contrary, allows a pilot or other personnel to take control of the aircraft during an emergency. Such a capability disclosed in Turung can be potentially disastrous, for example, when a terrorist tries to gain control of the aircraft. Like Turung, Nelson and Schminke also do not disclose or suggest these claim limitations.

In sharp contrast, in the present invention, "the avionic unit is configured to externally and/or automatically disable the collision avoidance function in accordance with predefined rules, immune to an operational input from the pilot, a hijacker, or an on-board terrorist," emphasis added. In other words, the present invention gains total control of the aircraft in the emergency stage. Therefore, for example, even if a terrorist/hijacker tries to take control of the aircraft by disabling the avionic unit to prevent it from going into an auto-pilot mode, he/she will not be able to do so, or force the pilot to do so. Therefore, the present invention provides a fool proof mechanism to ensure that the aircraft always stays on a safe course. Additionally, by establishing virtual spatial cones both during landing and take-off within which the aircraft is forced to stay within those spatial cones. The tamper proof nature of the avionic unit ensures that even if a terrorist/hijacker has gained some control of the aircraft, he/she will not be able to steer the plane into any civilian areas/building, or crash the plane in a suicide attempt.

Accordingly, in view of the foregoing amendments and remarks, the Office is respectfully requested to reconsider and withdraw this rejection of claims 12, 22, and 23. Since claims 13-16, 18, and 19 depend from and contain the limitations of claim 1, claim 24

depends from and contains the limitations of claim 23, they are distinguishable over the cited references and patentable in the same manner as claims 12 and 23.

Additionally, new dependent claims 25-32 are believed to be distinguishable over the cited references of record and in condition for allowance. A notice to this effect is respectfully requested.

In view of all of the foregoing, Applicant submits that this case is in condition for allowance and such allowance is earnestly solicited.

Respectfully submitted,

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